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APPLICATION NO	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO	CONFIRMATION NO
09 987,031	11 13 2001	Kenji Kamada	N36-138996M TH	6620

30743 7590 05 23 2003

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EXAMINER

COLAIANNI, MICHAEL

ART UNIT

PAPER NUMBER

1731

DATE MAILED: 05 23 2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/987,031

Applicant(s)

KAMADA ET AL.

Examiner

Michael P Colaiani

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 28 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 7-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

Art Unit: 1731

Election/Restrictions

Applicant's election without traverse of Group I, claims 1-6 in Paper No. 6 is acknowledged.

Claims 7-11 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 6.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Lumley 3610871.

Lumley teaches a forming a fracture in the surface of a glass sheet by using a laser such that the focal point (the beam condensing point) is positioned above the substrate (col. 3, lines 37-60). Lumley also teaches that the substrate's position may be manipulated and changed depending upon the desired depth of fracture required (col. 3, lines 56-59). Lumley also teaches moving the laser beam in a direction parallel to the surface of the glass substrate (Fig. 4).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1731

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lumley 3610871 in view of Rafla-Yuan et al. 5961852.

Lumley teaches applicant's claimed invention. See the 102(b) rejection above for Lumley's teachings. However, Lumley does not teach the laser pulse is not more than 10 picoseconds.

However, Rafla-Yuan et al. teach that it is known to use a pulsed laser having a pulse width of tens of nanoseconds (col. 4, lines 19-20). Moreover, Rafla-Yuan et al. teach that using a short pulse width limits the distance the laser travels into the material being grooved (col. 4, lines 19-21). Given Rafla-Yuan's teaching it would have been obvious to manipulate the pulse width to limit the distance the laser travels into the material.

Thus, it would have been prima facie obvious at the time the invention was made to combine Rafla-Yuan et al.'s teaching to use a short pulse width with Lumley's method of laser etching a glass piece for the reasons given in the body of the rejection.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lumley 3610871 in view of Shinohara et al. 6149988.

Lumley teaches applicant's claimed invention. See the 102(b) rejection for Lumley's teachings. However, Lumley does not teach the groove formed has an angle of 30° to 120°.

However, Shinohara teaches that it is known to use a laser to form a V-shaped groove in glass materials (Fig. 1, ref. no. 6-2, 6-1, 24). Controlling the width and duration of the laser exposure may readily optimize the particular angle of the groove. A person of ordinary skill in the art given Shinohara and Lumley's teachings would readily achieve the particular angle chosen.

It would have been prima facie obvious at the time the invention was made to combine Shinohara's teachings with Lumley's method of laser etching a glass piece because doing so would provide groove of differing depths and properties. Also, because Lumley teaches that the focal point of the laser may be adjusted in accordance with its distance from the substrate (col. 3, lines 55-59).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 1731

Claim 4 refers to "said beam-condensing point" which lacks antecedent basis.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P Colaianni whose telephone number is 703-305-5493. The examiner can normally be reached on Monday to Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 703-308-1164. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7115 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.



Michael P Colaianni
Primary Examiner
Art Unit 1731

MPC
May 22, 2003

MICHAEL COLAIANNI
PRIMARY EXAMINER